STATE OF WASHINGTON

STATE BUILDING CODE COUNCIL

215
TAG Revision 8/27/21

2015 Washington State Energy Code Development

Energy Code Proposal Short Form

For editorial **Coordination, Clarifications & Corrections** only, without substantive energy or cost impacts

May 2018

Log No. 215

Code being amended: ☐ Commercial Provisions ☐ Residential Provisions
(A MS Word version of the code is linked to the name)

Code Section # C406.13 – High efficiency circulation systems

Brief Description: Provides path to a C406.13 credit for the installation of ECM pumps with self-actuating thermostatic balancing valves. Projects incorporating this approach greatly reduce pumping energy consumption.

Proposed code change text:

~~**C406.13 High efficiency service hot water circulation systems.** Multi-riser service hot water circulation systems shall be installed with a pump operated by an Electronic Commuted Motor (ECM). Self-actuated thermostatic balancing valves shall be provided to balance system flow at each riser.~~

C406.13 High efficiency service hot water circulation systems. Multi-riser service hot water circulation systems shall use a variable volume circulation pump controlled to vary the pump speed based on system demand and shall include self-actuated thermostatic balancing valves to control the system flow at each riser.

TABLE C406.1
EFFICIENCY PACKAGE
CREDITS

Code Section	Commercial Building Occupancy					
	Group R-1	Group R-2	Group B	Group E	Group M	All Other
	Additional Efficiency Credits					
1. More efficient HVAC performance in accordance with Section C406.2	2.0	3.0	3.0	2.0	1.0	2.0
2. Reduced lighting power: Option 1 in accordance with Section C406.3.1	1.0	1.0	2.0	2.0	3.0	2.0
3. Reduced lighting power: Option 2 in accordance with Section C406.3.2[a]	2.0	3.0	4.0	4.0	6.0	4.0
4. Enhanced lighting controls in accordance with Section C406.4	NA	NA	1.0	1.0	1.0	1.0

5. On-site supply of renewable energy in accordance with C406.5	3.0	3.0	3.0	3.0	3.0	3.0
6. Dedicated outdoor air system in accordance with Section C406.6[b]	4.0	4.0	4.0	NA	NA	4.0
7. High performance dedicated outdoor air system in accordance with Section C406.7	4.0	4.0	4.0	4.0	4.0	4.0
8. High-efficiency service water heating in accordance with Sections C406.8.1 and C406.8.2	4.0	5.0	NA	NA	NA	8.0
9. High performance service water heating in multi-family buildings in accordance with Section C406.9	7.0	8.0	NA	NA	NA	NA
10. Enhanced envelope performance in accordance with Section C406.10[c]	3.0	6.0	3.0	3.0	3.0	4.0
11. Reduced air infiltration in accordance with Section C406.11 [c]	1.0	2.0	1.0	1.0	1.0	1.0
12. Enhanced commercial kitchen equipment in accordance with Section C406.12	5.0	NA	NA	NA	5.0	5.0 (Group A-2 only)
13. High efficiency circulation systems	~~1.0~~3.0	6 ~~1.0~~	2 ~~1.0~~	1.0	NA ~~1.0~~	4 ~~1.0~~

a. Projects using this option may not use Item 2.
b. This option is not available to buildings subject to the prescriptive requirements of Section C403.3.5.
c. Buildings or building areas that are exempt from thermal envelope requirements in accordance with Sections C402.1.1 and C402.1.2 do not qualify for this package.

Purpose of code change:

Projects incorporating this approach greatly reduce pumping energy consumption as compared to systems with constant volume and fixed flow balancing valves.

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Instructions: For use with Coordination, Clarifications & Corrections **ONLY**. Send this form as an email attachment, along with any other documentation available, to: sbcc@ga.wa.gov. For further information, call the State Building Code Council at 360-407-9277.